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Presentation Title:

"A new offset debris ring around a nearby star observed with the HST/STIS

coronagraph"

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Abstract: We are conducting an HST/STIS coronagraphic imaging study of nearby stars that have Spitzer-measured infrared excesses indicating that they are surrounded by debris disks. Around one of the stars we have imaged a debris ring with a sharp inner edge and extending from about 165 AU to 250 AU. The ring center is offset from the star by ~8 AU with a visually estimated intrinsic ellipticity of e~0.1, suggestive of gravitational perturbation of the disk by a planet, like the Fomalhaut disk. Assuming a neutral disk color, the mean surface brightness of V=22.3 mag/square arcsec makes this the second faintest disk yet imaged in scattered light, second to HD 207129.